

Appl. No. 10/809,268  
Amdt. Dated January 17, 2008  
Reply to Office Action of October 17, 2007

Attorney Docket No. 81707.0193  
Customer No. 26021

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A fuel cell assembly, which has a housing defining an electricity generation/combustion chamber, and electricity generation/combustion means disposed within said housing, and in which a fuel gas and an oxygen- containing gas are supplied to said electricity generation/combustion means, and a combustion gas formed within said electricity generation/combustion chamber is discharged from said electricity generation/combustion chamber,

wherein a heat exchanger having a first channel and a second channel is disposed on the inner side of at least one wall surface of said housing,

said combustion gas is discharged from an interior of said electricity generation/combustion chamber through said first channel of said heat exchanger, and

one of said oxygen-containing gas and said fuel gas is supplied to said electricity generation/combustion means through said second channel of said heat exchanger.

2. (Original) The fuel cell assembly according to claim 1, wherein  
said first channel and said second channel in said heat exchanger are superposed in a thickness direction of said surface, and  
said first channel and said second channel are opposed channels extending zigzag.

3. (Original) The fuel cell assembly according to claim 1, wherein  
said housing lies opposite flat side surfaces extending substantially  
vertically, and

    said heat exchanger is flat plate-shaped and is disposed on each of said  
opposite side surfaces.

4. (Original) The fuel cell assembly according to claim 1, wherein  
there are disposed a lower gas chamber located in a lower end portion  
of said housing, an upper gas chamber located in an upper end portion at said  
housing, and a communication gas chamber extending in an up-and-down direction  
within said housing to bring said upper gas chamber and said lower gas chamber  
into communication,

    said second channel has an inflow port disposed at a lower end at said  
heat exchanger, and an outflow port disposed at an upper end of said heat  
exchanger and leading to said upper gas chamber, and

    one of said oxygen-containing gas and said fuel gas is flowed into said  
second channel through said inflow port, and is supplied from said second channel  
to said electricity generation/combustion means through said upper gas chamber,  
said communication gas chamber, and said lower gas chamber.

5. (Original) The fuel cell assembly according to claim 1, wherein  
reforming means is disposed within said electricity  
generation/combustion chamber,

    said fuel gas is supplied to said electricity generation/combustion  
means through said reforming means, and

    said oxygen-containing gas is supplied to said electricity  
generation/combustion chamber through said second channel.

6. (Original) The fuel cell assembly according to claim 1, wherein  
a plurality of electricity generation units are arranged in parallel  
within said housing,

    said electricity generation/combustion means includes a cell stack  
composed of a plurality of cells,

    each of said electricity generation units includes said cell stack, a fuel  
gas case defining a fuel gas chamber, a reforming case, an unreformed gas supply  
pipe connected to said reforming case, and a fuel gas feed pipe connecting said  
reforming; case and said fuel gas case,

    said cells off said cell stack are arranged on one surface of said fuel gas  
case,

    said fuel gas within said fuel gas case is supplied to said cells, and

    said oxygen-containing gas is supplied., through said second channel of  
said heat exchanger.

7. (Original) The fuel cell assembly according to claim 6, wherein  
    said plurality of cells are disposed upright on an upper surface of said  
fuel gas case, and  
    said reforming case is placed above said cell stack.

8. (Original) The fuel cell assembly according to claim 6,  
    wherein in each of said electricity generation units, said fuel gas case  
is in a slenderly extending rectangular parallelopipedal shape, and  
    said cells are arranged in line in a longitudinal direction of said fuel  
gas case.

9. (Original) The fuel cell assembly according to claim 6, wherein in each of said electricity generation units, said reforming case slenderly extends along said fuel gas case above said cell stack, said unreformed gas supply pipe is connected to one end portion of said reforming case, and said fuel gas feed pipe connects said reforming case and said fuel gas case at other end portion of said reforming case.

10. (Original) The fuel cell assembly according to claim 1, wherein said electricity generation/combustion means includes a plurality of cell stacks, a first gas case supplied with one of said oxygen-containing gas and said fuel gas is disposed within said housing, said first gas case has a hollow-shaped manifold portion, and a plurality of hollow-shaped ejection portions protruding front one-side flat surface of said manifold portion substantially perpendicularly to said one-side flat surface, said ejection portions are arranged with spacing in a first direction on said one-side flat surface, an ejection hole is formed in at least one surface of each of said ejection portions, and each of said cell stacks is placed between the adjacent ejection portions.

11. (Original) The fuel cell assembly according to claim 10, wherein said manifold portion is placed substantially horizontally, with said one-side flat surface being directed upwards.

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12. (Original) The fuel cell assembly according to claim 10, wherein said ejection hole is in a form of a slit parallel to said one-side flat surface and extending in a second direction perpendicular to said first direction.
13. (Original) The fuel cell assembly according to claim 10, wherein a plurality of second gas cases at a hollow rectangular parallelopipedal shape placed on said one-side flat surface of said manifold portion between the adjacent section portions of said fuel gas case and extending in said second direction are disposed within said housing,  
the other of said oxygen-containing gas and said fuel gas is supplied to said second gas cases, and  
each of said cell stacks is placed on each of said second gas cases.
14. (Original) The fuel cell assembly according to claim 1, further comprising  
an upper gas chamber disposed in an upper portion of said housing, and  
a plurality of gas introduction members hanging down from said upper gas chamber, and  
wherein one of said oxygen-containing gas and said fuel gas is supplied through said upper gas chamber and said gas introduction members.

15. (Original) The fuel cell assembly according to claim 14, wherein  
said electricity generation/combustion moans includes a plurality of  
cell stacks each composed of a plurality of cells,  
said cell stacks are arranged in parallel with spacing in a horizontal  
direction, and  
said gas introduction members are pipes hanging down between said  
cell stacks and having lower ends open.
16. (Withdrawn) An electricity generation unit comprising  
a fuel gas case defining a fuel gas chamber;  
a cell stack composed of a plurality of cells arranged on one surface of  
said fuel gas case;  
a reforming case;  
an unreformed gas supply pipe connected to said reforming case; and  
a fuel gas feed pipe connecting said reforming case and said fuel gas  
case, and  
wherein a fuel gas within said fuel gas case is supplied to said cells.
17. (Withdrawn) The electricity generation unit according to claim 16,  
wherein  
said plurality of cells are disposed upright on an upper surface of said  
fuel gas case, and  
said reforming case is placed above said cell stack.

18. (Withdrawn) The electricity generation unit according to claim 16, wherein

    said fuel gas case is in a slenderly extending rectangular parallelopipedal shape, and

    said cells are arranged in line in a longitudinal direction of said fuel gas case.

19. (Withdrawn) The electricity generation unit according to claim 16, wherein;

    said reforming case slenderly extends along said fuel gas case above said cell stack,

    said unreformed gas supply pipe is connected to one end portion of said reforming case, and

    said fuel gas feed pipe connects said reforming case and said fuel gas case at other end portion of said reforming case.

20. (Original) A fuel cell assembly Comprising:

    a housing defining an electricity generation/combustion chamber; and  
    a plurality of electricity generation units arranged in parallel within said electricity generation/combustion chamber, and

    wherein each of said electricity generation units comprises a fuel gas case defining a fuel gas chamber, a cell stack composed of a plurality of cells arranged on one surface of said fuel gas case, a reforming case, an unreformed gas supply pipe connected to said reforming case, and a fuel gas feed pipe connecting said reforming case and said fuel gas case, and

    a fuel gas within said fuel gas case is supplied to said cells.

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21. (Original) The fuel cell assembly according to claim 20, wherein in each of said electricity generation units,

    said plurality of cells are disposed upright on an upper surface of said fuel gas case, and

    said reforming case is placed above said cell stack.

22. (Original) The fuel cell assembly according to claim 20, wherein in each of said electricity generation units,

    said fuel gas case is in a slenderly extending rectangular parallelopipedal shape, and

    said cells are arranged in line in a longitudinal direction of said fuel gas case.

23. (Original) The fuel cell assembly according to claim 20, wherein in each of said electricity generation units,

    said reforming case slenderly extends along said fuel gas case above said cell stack,

    said unreformed gas supply pipe is connected to one end portion of said reforming case, and

    said fuel gas feed pipe connects said reforming case and said fuel gas case at other end portion of said reforming case.

24. (Original) A fuel cell assembly, which has a housing defining an electricity generation/combustion chamber, and

Electricity generation/combustion means disposed within said housing, and in which said electricity generation/combustion means includes a plurality of cell stacks, a fuel gas and an oxygen-containing gas are supplied to said electricity generation/combustion means, and a combustion gas formed within said electricity generation/combustion chamber is discharged from said electricity generation/combustion chamber,

wherein a first gas case supplied with one of said oxygen-containing gas and said fuel gas is disposed within said housing,

said first gas case has a hollow-shaped manifold portion; and a plurality of hollow-shaped ejection portions protruding from one-side flat surface of said manifold portion substantially perpendicularly to said one-side flat surface,

said ejection portions are arranged with spacing in a first direction on said one-side flat surface,

an ejection hole is formed in at least one surface of each of said ejection portions, and

each of said cell stacks is placed between the adjacent ejection portions.

25 (Original) The fuel cell assembly according to claim 24, wherein said manifold portion is placed substantially horizontally, with said one-side flat surface being directed upwards.

26. (Original) The fuel cell assembly according to claim 24, wherein said ejection hole is in a form of a slit parallel to said one-side flat surface and extending in a second direction perpendicular to said first direction.

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27 (Original) The fuel cell assembly according to claim 24, wherein  
a plurality of second gas cases at a hollow rectangular parallelopipedal  
shape placed on said one-side flat surface of said manifold portion between the  
adjacent ejection portions of said first gas case and extending in said second  
direction are disposed within said housing,  
the other of said oxygen-containing gas and said fuel gas is supplied to  
said second gas cases, and  
each of said cell stacks is placed on each of said second gas cases.